

What is claimed is:

1. Apparatus for providing termination for at least a first pin of a multi-pin component to be mounted in a footprint area of a first surface of a first circuit board, comprising:
a second circuit board, configured for mounting on a second surface of said first circuit
5 board and configured for providing at least a first resistance;
at least a first conductive pathway from said at least first pin of said multi-pin component to at least a first location of said second circuit board; and
a conductive pathway, formed at least partially using said second circuit board, from said first location of said second circuit board to said first resistance.
2. Apparatus, as claimed in Claim 1, wherein said multi-pin component comprises an ASIC.
3. Apparatus, as claimed in Claim 1, wherein said resistance is positioned on a surface of said second circuit board.
4. Apparatus, as claimed in Claim 1, wherein said resistance is positioned in an interior region of said circuit board.
5. Apparatus, as claimed in Claim 1, wherein said resistance is selected from among a surface mount resistor, a printed resistance and a buried resistance.
6. Apparatus, as claimed in Claim 1, wherein at least a portion of said conductive pathway includes a pathway using a via formed in said first circuit board.
7. Apparatus, as claimed in Claim 1, wherein said second board is aligned within at least a portion of the region defined by said footprint.

8. Apparatus, as claimed in Claim 1, wherein a first portion of said second circuit board is positioned within the region defined by said footprint and a second portion of said second circuit board is positioned within a region outside said footprint.

9. Apparatus, as claimed in Claim 8, wherein said second portion of said second board provides at least a portion of a conductive pathway to a location of said first circuit board outside said footprint.

10. Apparatus, as claimed in Claim 1, wherein said first pin carries a signal having a frequency greater than about 1 gigahertz.

11. Apparatus, as claimed in Claim 1, wherein each of said first and second circuit boards has a thickness and wherein said conductive pathway is less than the sum of the thicknesses of said first and second circuit boards.

12. Apparatus, as claimed in Claim 1, wherein said second circuit board is coupled to said first circuit board by a ball grid array.

13. Apparatus, as claimed in Claim 1, wherein said multi-pin component and said second circuit board are coupled to said main circuit board substantially simultaneously.

14. A method for providing termination for at least a first pin of a multi-pin component to be mounted in a footprint area of a first surface of a first circuit board, comprising:
providing at least a first via in said footprint area of said first circuit board, defining at least part of a first conductive pathway to a second surface of said first circuit board;
5 positioning at least one pin of said multi-pin component aligned with said at least first via;
providing a second circuit board;

defining at least a portion of a second conduction pathway leading to at least a first resistance, using said second circuit board;

- 10 positioning said second circuit board to conductively couple said first pathway with said second pathway; and
- coupling said multi-pin component and said second circuit board to said first circuit board.

15. A method as claimed in claim 14 further comprising:

 providing a ball grid array for at least one of said multi-pin components and said second circuit board.

16. A method as claimed in claim 14 wherein coupling said multiple component and coupling said second circuit board are performed substantially simultaneously.

17. Apparatus for providing termination for at least a first pin of a multi-pin component to be mounted in a footprint area of a first surface of a first circuit board, comprising:

 board means for providing at least a portion of a first conductive pathway to a resistor, configured for mounting on a second surface of said first circuit board; and

- 5 means for providing at least a portion of a second conductive pathway from said first pin to said first conductive pathway.